

to their visit to General Practitioner. Study population I: Before the implementation of guidelines and the educational leaflet. Study population II: After the implementation of guidelines and the educational leaflet. Cross-sectional analysis and descriptive analyses was performed using the Statistical Package for Social Sciences (SPSS). **RESULTS:** The total number of antibiotic prescriptions for patients suffering from U.R.T.I. including sore throat was significantly reduced in the intervention group (67% reduction). **CONCLUSIONS:** A multi-dimensional interventional approach for reducing antibiotic prescription in U.A.E. clinics resulted in a significant positive outcome. The significant reduction in antibiotic prescriptions indicates the willingness of physicians to follow guidelines and the willingness of patients to respond to educational information.

PSS24

#### QUALITY OF LIFE IN OCULAR HYPERTENSION AND PRIMARY OPEN ANGLE GLAUCOMA

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**OBJECTIVES:** To estimate the impact of ocular hypertension (OHT)/primary open-angle glaucoma (POAG) on health status and quality-of-life. **METHODS:** Classification of disease state followed European Glaucoma Society guidelines. Health status was based upon the Health Utility Index Mark 3 (HUI3) The National Eye Institute 25-Item Visual Function Questionnaire (NEI-VFQ-25) was self-administered. Utility scores were compared to a normal population matched by age and gender. Differences in health impact and quality-of-life between the different disease states were assessed. **RESULTS:** 154 patients were enrolled (27 OHT, 43 early, 35 moderate, 49 advanced POAG) from 15 centers in Germany, 137 were diagnosed 35 years ago. Average age was 67 ± 11 and 57% were female. 23% of patients had cardiovascular co-morbidity, 45% history of cataract, 45% hypertension, 18% diabetes, and 10% hypotension. Differences in baseline characteristics were seen for age (60, 63, 69, 72 years), history of cataract (24%, 25%, 54%, 62%), employment status (43%, 24%), and hypotension (14%, 0%, 14%, 15%). The HUI3 score for OHT, early, moderate and advanced POAG was 0.87 ± 0.09, 0.85 ± 0.15, 0.75 ± 0.23 and 0.58 ± 0.32, respectively. There was no difference in the health utility score for patients with OHT, early POAG and the normal population. Patients with moderate and advanced POAG were lower by 0.06 ± 0.24 and 0.19 ± 0.28, significantly different from OHT and early POAG ( $P < 0.01$ ). The NEI-VFQ-25 for OHT and early POAG gave ocular symptoms and mental health the lowest scores. For moderate POAG the lowest scores were for driving, ocular symptoms, mental health, role limitation and peripheral vision. For advanced POAG, all domains, except color vision, were affected. **CONCLUSIONS:** Disease progression in glaucoma affects not only vision, but also quality-of-life. Whereas OHT and early POAG have little effect on quality-of-life, moderate and advanced POAG do. These findings can improve doctor-patient relationships, addressing quality-of-life issues for different glaucoma disease states.

PSS25

#### MAPPING THE IMPACT OF DRY EYE ON EVERYDAY LIFE (IDEEL) QUESTIONNAIRE TO A PREFERENCE BASED UTILITY INDEX

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**OBJECTIVES:** The aim of the current study was to develop an algorithm to map the symptom domain of the Impact of Dry Eye on Everyday Life (IDEEL) questionnaire to a preference based utility index. **METHODS:** Data from an IDEEL psychometric validation study including 210 participants (130 dry eye patients, 32 Sjogren's patients and 48 controls) were used to estimate the algorithm. Participants completed the IDEEL, EQ-5D and SF-36 at 2 time points; the first time point was used to estimate the algorithm and the second to validate the algorithm. The mapping work was preceded by determining bivariate correlations between the IDEEL items and each utility index (EQ-5D and SF-6D), and then examining the sensitivity of each index to variability in dry eye severity. Initial items were selected based on levels of missing data, floor and ceiling effects and correlations with the utility index. Items were then included in an OLS regression model with age and gender interaction terms. Following the item analysis the same procedures were applied to a domain level analysis. **RESULTS:** Based on the criteria outlined above, the SF-6D was selected as the utility index for the mapping algorithm. The final OLS regression model contained 2 IDEEL symptoms items and age, and explained 28% of the variance in SF-6D utility values; root mean squared error (RMSE) = 0.105. As the SF-6D data included few bounded or censored estimates Tobit and CLAD models were not estimated. The validation data set demonstrated a significant correlation between the predicted and observed SF-6D utility values ( $r = 0.53$ ,  $p < 0.001$ ). **CONCLUSIONS:** This algorithm forms a good basis to estimate utility values from the IDEEL for inclusion in cost-effectiveness analysis.

PSS26

#### REVIEW OF UTILITIES IN ATOPIC DERMATITIS

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**OBJECTIVES:** To identify and review published utility estimates in atopic dermatitis (AD), and to catalogue the methods of utility assessment, patient populations studied, and economic evaluations incorporating the utility estimates. **METHODS:** A system-

atic search and review of the published literature, including health technology assessments, in AD was performed. Utility search terms were those recommended by NICE in the UK Publications were limited to English language only, from 1999 through 2010. **RESULTS:** Fourteen studies presenting 15 different sets of utility data in AD (one study used two separate methods to generate estimates) were identified. These 14 studies are summarized in 11 separate publications (one health technology assessment describes three otherwise unpublished utility studies). All studies but one present utility estimates (vs changes in utility). Two studies present a single utility estimate for AD. One study presents utility estimates for controlled vs. uncontrolled AD. All other studies present utility estimates by AD severity (e.g., clear, mild, moderate, severe), although only two studies link AD severity directly to IGA scores. Two studies present utility estimates for children. AD utilities have been collected or applied in economic evaluations in Canada, Germany, Sweden, the UK, and the US. Utilities in AD have been collected directly using SG, TTO, VAS (with the VAS results being converted into utilities for use in economic evaluations using an algorithm that reflects attitudes towards risk), and using the EQ5D. Three studies have generated utility estimates based on applying two separate published algorithms to SF-12 or SF6D data. Five sets of utility data have been used in economic evaluations. **CONCLUSIONS:** There are several published studies presenting utility estimates in AD; however, they vary greatly in terms of methods employed. Economic evaluations in AD, the results of which are sensitive to uncertainty in utility inputs, have relied on various estimates.

PSS27

#### COSMETI QOL: A TOOL FOR ASSESSING QUALITY OF LIFE IN COSMETIC DERMATOLOGY

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**OBJECTIVES:** The assessment of quality of life (QoL) in dermatology is becoming increasingly popular as demonstrated by the creation and development of numerous questionnaires for the principal diseases of the skin. Paradoxically, although cosmetic dermatology is rapidly developing, there is no questionnaire to assess the impact of these products on the QoL of the women that use them. There was therefore a need for the creation of the Cosmeti QoL. **METHODS:** The questionnaire was developed using rigorous methodology in accordance with international standards in terms of quality of life. A literary review and face-to-face interviews were conducted to identify the concepts that preoccupied women over 25 years of age. Twenty-two items were identified after the first transcription; this was reduced to 12 items after an initial analysis making it easier to use. A representative population of 1002 French women aged 25 years and over, was put together by the CSA Santé institute using the quota method. They were given the Cosmeti QoL; the lower the score the better the QoL. **RESULTS:** The questionnaire is easy to use, good comprehension of the questions was observed. The Cosmeti QoL score is correlated to age. An improved QoL is seen in women who frequently use a moisturizing cream (13.7 vs. 14.23,  $P < 0.001$ ). Sensitive skin resulted in poorer QoL (14.77 vs. 13.34  $P < 0.001$ ), the frequency of episodes of sunburn during childhood also reduced the QoL (14.96 vs. 13.86  $P < 0.001$ ). In the population over 65 years of age, the QoL was superior in women who claimed to use cosmetic, anti-wrinkle, or moisturizing products on a regular basis. **CONCLUSIONS:** The Cosmeti QoL scale, which is essentially based on the women's point of view, is a valid, pertinent, and well accepted tool enabling the assessment of quality of life perceived through the skin.

PSS28

#### DEVELOPMENT OF AN INSTRUMENT MIRRORING PATIENT AND PHYSICIAN PERCEPTION OF PSORIASIS SEVERITY AND TREATMENT EFFECT

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**OBJECTIVES:** No consensus on definition of plaque psoriasis severity currently exists. Although standard measures of psoriasis severity are commonly used in clinical practice, they are not consistent and rarely based on patient assessment. The objective was to develop an instrument assessing patient and physician perceptions of psoriasis severity and treatment effect. **METHODS:** Semi-directive exploratory interviews were conducted with 20 patients with mild to severe plaque psoriasis, and with 20 dermatologists. Interviews' transcripts were analyzed to extract and organise into models the criteria used by patients and physicians to evaluate psoriasis severity and treatment benefit. Items were generated using patient words for each concept considered relevant by both patients and dermatologists. The instrument was developed in parallel for patients and for physicians, tested for relevance and comprehension on 5 patients and 5 physicians, and revised accordingly. The new version was tested on 5 new patients and 5 new physicians and revised to create a pilot version. A dermatologist advisory board was involved at each step of the instrument development. **RESULTS:** The test instrument consisted in 31 items including area involvement, lesion location, signs and symptoms (frequency, duration of lesions, joint involvement), treatment history, quality of life impact, rapidity and duration of treatment benefit, and patient satisfaction. The instrument was globally well-accepted by patients and physicians; few modifications were made. A 32-item pilot version resulted from the comprehension

tests. **CONCLUSIONS:** The instrument constitutes a single tool to assess both patient and physician perceptions of psoriasis severity and treatment effect. The availability of a shared instrument may improve treatment decision-making, reconciling patient and physician perceptions. An observational study with 100 dermatologists and 561 patients is planned to assess agreement between patient and clinician perceptions; scoring and psychometric properties will also be validated.

PSS29

#### INTERNATIONAL CO-VALIDATION OF A NEW INTERNATIONAL QUALITY OF LIFE INSTRUMENT SPECIFIC TO PHYSICAL APPEARANCE: BEAUTYQOL

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**OBJECTIVES:** This research has been driven by the need for a quality of life (QoL) instrument that specifically assesses physical appearance. The BeautyQol instrument is a multi-dimensional, self administered questionnaire, which has been in development for over three years in 16 languages. **METHODS:** In the item generation phase, semi directive interviews were conducted in 309 subjects. In the second phase an acceptability study was conducted on 874 subjects in France, UK, Germany, Spain, Sweden, Italy, Russia, USA, Brazil, Japan, India (Hindi and English) China and South Africa (Zulu, Sotho and English). In the third phase, a total of 3231 subjects were recruited, to complete the BeautyQoL questionnaire, a skin clinical checklist, SF-36 and a socio-demographic questionnaire. A re-test has been carried out at 8 days on a subgroup of 652 subjects. The database was randomly divided into two subgroups and analyzed using a Rasch analysis. Psychometric properties, construct validity, reproducibility, internal and external consistency were tested. **RESULTS:** From the item generation phase, 62 questions were selected. General acceptability was very good in the 16 cultures, with a very low rate of no answers. The validation phase reduced the questionnaire in 44 questions structured in five dimensions explaining 76.7% of the total variance: Social Life, Self confidence, Psychological life, Vitality and Seduction. Internal consistency was high (Cronbach alpha coefficients between 0.932 and 0.978). Reproducibility at 8 days was satisfactory in all dimensions. External validity testing revealed that BeautyQol scores correlated significantly with all SF-36 scores except for Physical Function. Mean completion time was 7 minutes (median:5 minutes). **CONCLUSIONS:** These results demonstrate the validity and reliability of the BeautyQol questionnaire as the very first international instrument specific to physical appearance. It is expected that BeautyQoL will be an instrument that will measure QoL affected by cosmetic products, techniques and agents that alter physical appearance.

PSS30

#### DISCREPANCY IN PATIENT AND PHYSICIAN GLOBAL ASSESSMENTS OF DERMATOLOGIC DISEASES

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**OBJECTIVES:** To investigate discrepancy in the perception of dermatologic diseases (DD) severity between patients and physicians. **METHODS:** A descriptive study was performed: 2459 patients with DD rated their level of disease severity on a five level scale: very mild, moderate, severe, very severe (PtGA). Physician global assessment (PhGA) was performed on the same scale. Fifty three physicians were involved in an out-patient setting for three weeks (March 2010) in a dermatologic research hospital, Rome, Italy. **RESULTS:** Patients were predominantly females (59%), with an high education and the majority were employed; mean age was 45.9 ± 18.5 for females and 44.5 ± 18 for males. No discrepancy between PhGA and PtGA was observed in 37% of cases; PtGA under-rated compared to the physician in 35%; and PtGA over-rated relative to the physicians in 28%. Statistically significant differences were observed between PtGA and PhGA in each of the five levels of judgement ( $P < 0.001$ ). Higher percentages of patients, in respect to physicians, reported very mild, severe and very severe evaluations. Physicians tended to overestimate for mild and moderate levels. Differences were observed between male and female physicians in the severity judgement, reaching a statistically significant difference for the very mild level ( $P < 0.001$ ) where females were more represented. **CONCLUSIONS:** The perceived severity disease in DD was different between patients and physicians and it was different in patients in respect to sex. Only for very mild DD there was a difference in PhGA between males and females, with males underestimating the severity.

PSS31

#### VISION-RELATED QUALITY OF LIFE INSTRUMENTS (QOL) AFTER REFRACTIVE CATARACT SURGERY

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**OBJECTIVES:** To review the available vision-related QoL instruments that could be used to investigate the consequences of refractive cataract surgery, in particular the benefit of spectacle independence. **METHODS:** A literature review was undertaken on PubMed and Embase databases using keywords "Refractive Surgical Procedures",

"Refractive Errors", "Refractive", "Questionnaire", and "QoL". Questionnaires were selected if they were developed for cataract or refractive surgery, based on the reading of the manuscript abstract. A further search was performed on PubMed, Embase and ProQolid databases to obtain information on development and psychometric validation of the questionnaires. Authors were contacted by email if missing data were identified from the published literature. Main characteristics of the questionnaires were described including number of items, targeted population, mode of administration, response scale, languages, and number of publications. Development methodology was reviewed (literature review, clinician input, patient input and comprehension test). Psychometric properties were examined (e.g. domain description, scoring algorithm, internal consistency, clinical validity, reproducibility, responsiveness). The above characteristics were then examined in light of the US FDA's "Guidance for Industry Patient-Reported Outcome Measures: Use in Medical Product Development to Support Labeling Claims". **RESULTS:** A total of 141 abstracts were reviewed and 14 questionnaires were identified. Four instruments had both a solid development methodology and good psychometric properties: the CatQuest (Cataract Questionnaire), the NEI-RQL-42 (US National Eye Institute Refractive Error QoL instrument-42), the NEI-VFQ-25 (US National Eye Institute Visual Function Questionnaire-25) and the RSVP (Refractive Status and Vision Profile). When including the ability to assess vision-related QoL with the benefit of not wearing glasses, it appeared that the NEI-RQL-42 was one of the best candidates, although the benefits of spectacle independence could be more deeply explored. **CONCLUSIONS:** According to this literature review, the NEI-RQL-42 could be considered as one of the best instruments to capture refractive vision-related QoL consequences after cataract surgery.

PSS32

#### THE EXPERIENCE OF EXTERNAL GENITAL WARTS AND GENITAL HERPES ON QUALITY OF LIFE

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**OBJECTIVES:** Estimates of the lifetime prevalence of external genital warts (EGW) and genital herpes in the European Union range from 0.47% to 1.52% and 0.59% to 1.43% respectively. The aim here is to assess, for the first time, the impact of the experience on current health related quality of life at the general population level. **METHODS:** Data are from the 2008 National Health and Wellness Survey. This is an internet-based survey carried out in the UK, France, Spain, Italy and Germany. From a total of 53,524 respondents, 521 indicated they had experienced EGW and 520 genital herpes. Only 63 had experienced both conditions. The regression analysis is based on health state utilities (score 0–100) from the SF-6D. The independent variables included binary variables for the presence/absence of EGW and genital herpes, socio-demographic characteristics, health risk factors (e.g., body mass index) and the Charlson Comorbidity Index (CCI). **RESULTS:** The experience of EGW and genital herpes had a substantial negative impact on utility scores. The impact was significant at conventional decision levels: EGW—2.47 (95% CI: -3.58—1.36), genital herpes -3.52 (95%CI: -4.63—2.71) and EGW and genital herpes -5.00 (95%CI: 1.76—8.25). The impact of EGW and genital herpes experience was similar to the negative impact of BMI for persons who were underweight, obese and morbidly obese and the CCI (-2.53;95%CI: -2.65—2.41). Age, education and income all had a positive and significant impact on HRQoL. **CONCLUSIONS:** This is the first time the lifetime experience of two of the most prevalence sexually transmitted infections (STIs) on current HRQoL has been assessed. The results point to the continuing impact of this experience, with herpes having a marginally greater impact than EGWs. The HRQoL deficit is most apparent for those who have experienced both STIs.

#### SENSORY SYSTEMS DISORDERS – Health Care Use & Policy Studies

PSS33

#### REAL-LIFE DOSING OF BIOLOGICS IN PLAQUE PSORIASIS—A GERMAN SURVEY

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**OBJECTIVES:** Evaluation of use, dose distribution, and dosing rationale of biologic treatments in plaque psoriasis within private practices and hospitals in Germany. **METHODS:** Fully structured Online Questionnaire using Umfragecenter® software. Panel participants were selected by DocCheck Medical Services using their MediAccess Pool. Survey was done in December 2009. 100 dermatologists (60 in private practices, 40 in hospitals) were included in the survey. Inclusion criterion: currently treating at least two psoriasis patients with biologics, at least one patient on adalimumab, etanercept or infliximab. **RESULTS:** Each surveyed dermatologist treated approximately 100 psoriasis patients per quarter. In private practice about 10% of these patients were treated with a biologic, while in hospitals about 23% received biologic treatment. About 40% of the patients receiving a biologic suffered from psoriatic arthritis as well. Distribution of the different biologics used was as follows: etanercept 37%, adalimumab 33%, infliximab 20%, and ustekinumab 10%. Only minor differences in those proportions were observed between private practices and hospitals. In about 80% of all cases, used dosing for each biologic conformed to the respective label. In other cases, increased dosages were observed, for example: 12% of adalimumab patients received 40 mg weekly, 17% of etanercept patients being treated longer than